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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/650,464      | 08/28/2003  | Shawn P. Kccncy      | WHLK/043            | 7110             |

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SHREWSBURY, NJ 07702

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| EXAMINER |
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TANG, SON M

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| ART UNIT | PAPER NUMBER |
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2612

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| MAIL DATE | DELIVERY MODE |
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08/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/650,464

Applicant(s)

KEENEY ET AL.

Examiner

SON M. TANG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 5/23/2008 (Affirm-in-part).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DECISION ON APPEAL

In responds to the Board's decision affirm-in-part dated 5/23/2008.

Claims **1-9, 12, 14 and 15** are affirmed by the Board, based on the previous rejection.

Claims **10, 11, 13 and 16** are reversed, and they are being rejected as follow:

#### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 13 recites the limitation "said audio warning signal" in line 2. There is insufficient antecedent basis for this limitation in the claim.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim **16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Markwell et al. [US 6,532,406; Markwell].

**Regarding claim 16:** Markwell discloses an alarm unit (10) comprising:

-an audio circuit (horn 56) [Fig. 3] for generating an audio warning signal, and an application specific integrated circuit (ASIC) (40) coupled to said audio circuit at pins 27-29, for triggering said audio warning signal indicating smoke detection, Markwell does not specifically shows that the ASIC selects an audio frequency for audio warning signal. However, Markwell discloses

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that the ASIC is able to change the frequency of the horn [see Fig. 3, col. 11 lines 57-62 and col. 9, lines 17-23], which showed that ASIC is provided different alarm pattern/frequencies indicative of the various condition types stored in the memory. It would have been obvious of one having ordinary skill in the art to recognize that the ASIC (40) is able to select the alarm frequency for audio warning signal that indicates a particular alarm condition.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bechtel [US 5,896,092] in view of Markwell et al. [US 6,532,406; Markwell] and further in view of Park et al. [US 5,694,118].

**Regarding to claim 10:** Bechtel and Markwell disclose all the limitations as described above, except for not specifically mention that the flash circuit comprises a voltage doubler, Park et al. teaches an alarm unit comprising, a voltage doubler (108 in Fig. 6, col. 6, lines 1-10), whereby the voltage doubler circuit charges a capacitor of the light tube. It is obvious of one having ordinary skill in the art at the time the invention was made to employ a voltage doubler as suggested by Park et al. in the alarm unit of the combination above, so that the increased voltage can be supplied to light tube, for the purpose of increasing the intensity of the light, to vary the output (i.e. shine brighter equal louder horn).

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bechtel [US 5,896,092] in view of Markwell et al. [US 6,532,406; Markwell] and further in view of Smith et al. [US 2004/0169585].

**Regarding claim 11:** Bechtel and Markwell et al. disclose all the limitations as described above, except for not specifically mention that the charge cycle is greater than 8 KHz. Smith

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et al. teaches a pest deterrence alarm apparatus comprising a microcontroller provides a charge of 20 KHz to flash capacitor, which is greater than 8 KHz. [see ¶ 0036]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to implement a charge cycle that is greater than 8 KHz. as suggested by Smith et al. in the flash circuit of the combination above, so that flash circuit is being able to increase flash pulses as user desired.

**Regarding claim 13:** Bechtel, Markwell and Smith et al. made obvious above, Markwell further teaches that ASIC chip has stored variety of an audible alarm horn pattern and generates the alarm pattern by varying voltage supplied to change the frequency to the horn [see col. 9, lines 18-22 and col. 11, lines 57-59], which constitutes of the ASIC chip selects an audio frequency pattern for the alarm signal. Further more, Smith et al. also teaches that microcontroller (14) selects a partially audible warning signal [see Fig. 2B, ¶ 0034] the warning signal having a sweep frequency from 15KHz to 25KHz. Both references teach the IC circuit chip selects frequency for audio warning signal. Therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made to have an audio warning frequency selected by ASIC/microcontroller as suggested by Smith et al. and Markwell, so that the audio warning signal can be distinctive.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Preston [US 4,578,586] discloses horn (172) intensity control (180) which met limitation of selecting alarm pattern.

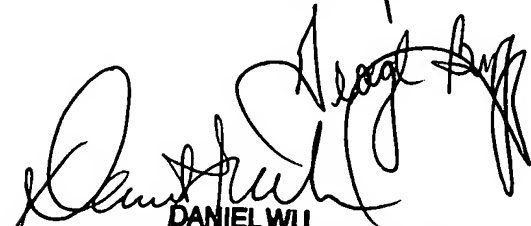
Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON M. TANG whose telephone number is (571)272-2962. The examiner can normally be reached on 5/8.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George A. Bugg can be reached on (571)272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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